

Express Mail Label No.: EF371230760US  
Date of Deposit: July 31, 2001

Attorney Docket No. 14445-501 (NCHEM-1)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS : Chalifour *et al.*  
ASSIGNEE : NEUROCHEM INC.  
SERIAL NUMBER : 09/724,842 EXAMINER : Not Yet Assigned  
FILING DATE : November 28, 2000 ART UNIT : Not Yet Assigned  
FOR : VACCINE FOR THE PREVENTION AND TREATMENT OF  
ALZHEIMER'S AND AMYLOID RELATED DISEASES

Assistant Commissioner for Patents  
Washington, D.C. 20231

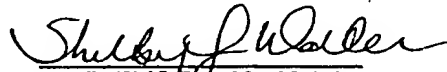
July 3, 2001  
Boston, Massachusetts

STATEMENT IN SUPPORT OF COMPUTER READABLE  
FORM SUBMISSION UNDER 37 C.F.R. § 1.821(f)

Sir:

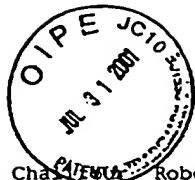
I hereby state that the content of the paper and computer readable forms of the Sequence Listing, submitted in the above-identified application in accordance with 37 C.F.R. § 1.821(c) and 1.821(e), respectively, are the same. No new matter is added.

Respectfully submitted,



Ivor R. Elrifi, Reg. No. 39,529  
Michel Morency, Limited Recognition  
Shelby J. Walker, Reg. No. 45,192  
Attorneys for Applicants  
c/o MINTZ, LEVIN  
One Financial Center  
Boston, Massachusetts 02111  
Tel: (617) 542-6000  
Fax: (617) 542-2241

09724842-073101



SEQUENCE LISTING

<110> Chai, ~~Robert~~ Robert  
Hebert, Lise  
Kong, Xianqi  
Gervais, Francine

<120> VACCINE FOR THE PREVENTION AND TREATMENT OF ALZHEIMER'S  
AND AMYLOID RELATED DISEASES

<130> 14445-501

<140> 09/724,842

<141> 2000-11-28

<150> 60/168,594

<151> 1999-11-29

<160> 63

<170> PatentIn Ver. 2.1

<210> 1

<211> 42

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 1

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys  
1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile  
20 25 30

Gly Leu Met Val Gly Gly Val Val Ile Ala  
35 40

<210> 2

<211> 40

<212> PRT

<213> Artificial Sequence

<220>

00724842.073101

09724842-073101

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 2

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys  
1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile  
20 25 30

Gly Leu Met Val Gly Gly Val Val  
35 40

<210> 3

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 3

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys  
1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile  
20 25 30

Gly Leu Met  
35

<210> 4

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 4

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys  
1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys

<210> 5  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 5  
Asp Ala Glu Phe Arg His Asp  
1 5

<210> 6  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 6  
Tyr Glu Val His His Gln Lys  
1 5

<210> 7  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 7  
Lys Leu Val Phe Phe Ala  
1 5

<210> 8  
<211> 7  
<212> PRT

09724842.073101

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 8

Val Gly Gly Val Val Ile Ala  
1 5

<210> 9

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 9

Lys Ile Val Phe Phe Ala  
1 5

<210> 10

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 10

Lys Lys Leu Val Phe Phe Ala  
1 5

<210> 11

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

09724842.073101

<400> 11  
Lys Phe Val Phe Phe Ala  
1 5

<210> 12  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 12  
Ala Phe Phe Val Leu Lys  
1 5

<210> 13  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 13  
Lys Leu Val Phe  
1

<210> 14  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 14  
Lys Ala Val Phe Phe Ala  
1 5

<210> 15

09724842-073401

<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 15  
Lys Leu Val Phe Phe  
1 5

<210> 16  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 16  
Lys Val Val Phe Phe Ala  
1 5

<210> 17  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (6)  
<223> AMIDATION

<400> 17  
Lys Ile Val Phe Phe Ala  
1 5

<210> 18  
<211> 6

09724842.073101

<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics  
  
<220>  
<221> MOD\_RES  
<222> (6)  
<223> AMIDATION  
  
<400> 18  
Lys Leu Val Phe Phe Ala  
1 5  
  
<210> 19  
<211> 6  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics  
  
<220>  
<221> MOD\_RES  
<222> (6)  
<223> AMIDATION  
  
<400> 19  
Lys Phe Val Phe Phe Ala  
1 5  
  
<210> 20  
<211> 6  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics  
  
<220>  
<221> MOD\_RES  
<222> (6)



00724842-073101

<223> AMIDATION

<400> 20

Ala Phe Phe Val Leu Lys

1

5

<210> 21

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>

<221> MOD\_RES

<222> (4)

<223> AMIDATION

<400> 21

Lys Leu Val Phe

1

<210> 22

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>

<221> MOD\_RES

<222> (6)

<223> AMIDATION

<400> 22

Lys Ala Val Phe Phe Ala

1

5

<210> 23

<211> 5

<212> PRT

09724842.073101

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>

<221> MOD\_RES

<222> (5)

<223> AMIDATION

<400> 23

Lys Leu Val Phe Phe  
1 5

<210> 24

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>

<221> MOD\_RES

<222> (6)

<223> AMIDATION

<400> 24

Lys Val Val Phe Phe Ala  
1 5

<210> 25

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 25

Lys Leu Val Phe Phe Ala Gln  
1 5

0974842.073101

<210> 26  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (7)  
<223> AMIDATION

<400> 26  
Lys Leu Val Phe Phe Ala Gln  
1 5

<210> 27  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 27  
His His Gln Lys Leu Val Phe Phe Ala Gln  
1 5 10

<210> 28  
<211> 3  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 28  
Asp Asp Asp  
1

09724842.073101

<210> 29  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 29  
Lys Val Asp Asp Gln Asp  
1 5

<210> 30  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 30  
His His Gln Lys  
1

<210> 31  
<211> 2  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (2)  
<223> CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub>H attached at the n-terminus

<400> 31  
Phe Phe  
1

<210> 32

09724842.073101

<211> 2  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (2)  
<223> CH2CH2CH2SO3H attached at the n-terminus

<400> 32  
Phe Phe  
1

<210> 33  
<211> 2  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (2)  
<223> CH2CH2CH2CH2SO3H attached at the n-terminus

<400> 33  
Phe Phe  
1

<210> 34  
<211> 2  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES

09724842.073101

<222> (2)  
<223> CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub>H attached at the n-terminus

<400> 34  
Phe Tyr  
1

<210> 35  
<211> 2  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (2)  
<223> CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub>H attached at the n-terminus

<400> 35  
Phe Tyr  
1

<210> 36  
<211> 2  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (2)  
<223> CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub>H attached at the n-terminus

<400> 36  
Phe Tyr  
1

<210> 37  
<211> 2

09724842.073101

<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics  
  
<220>  
<221> MOD\_RES  
<222> (1)  
<223> HO3SCH2CH2 attached at the c-terminus  
  
<400> 37  
Phe Phe  
1  
  
<210> 38  
<211> 2  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics  
  
<220>  
<221> MOD\_RES  
<222> (1)  
<223> HO3SCH2CH2CH2 attached at the c-terminus  
  
<400> 38  
Phe Phe  
1  
  
<210> 39  
<211> 2  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics  
  
<220>  
<221> MOD\_RES  
<222> (1)

09724842.073101

<223> HO3SCH2CH2CH2 attached at the c-terminus

<400> 39

Phe Phe

1

<210> 40

<211> 2

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>

<221> MOD\_RES

<222> (1)

<223> HO3SCH2CH2 attached at the c-terminus

<400> 40

Phe Tyr

1

<210> 41

<211> 2

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>

<221> MOD\_RES

<222> (1)

<223> HO3SCH2CH2CH2 attached at the c-terminus

<400> 41

Phe Tyr

1

<210> 42

<211> 2

<212> PRT



09724842-073101

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>

<221> MOD\_RES

<222> (1)

<223> HO3SCH2CH2CH2 attached at the c-terminus

<400> 42

Phe Tyr

1

<210> 43

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>

<221> MOD\_RES

<222> (1)

<223> HO3SCH2CH2 attached at the c-terminus

<400> 43

Leu Val Phe Phe Ala

1

5

<210> 44

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>

<221> MOD\_RES

<222> (1)

<223> HO3SCH2CH2CH2 attached at the c-terminus

09724842.073101

<400> 44  
Leu Val Phe Phe Ala  
1 5

<210> 45  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (1)  
<223> HO3SCH2CH2CH2CH2 attached at the c-terminus

<400> 45  
Leu Val Phe Phe Ala  
1 5

<210> 46  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (5)  
<223> CH2CH2SO3H attached at the n-terminus

<400> 46  
Leu Val Phe Phe Ala  
1 5

<210> 47  
<211> 5  
<212> PRT  
<213> Artificial Sequence

00724842.073101

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (5)  
<223> CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub>H attached at the n-terminus

<400> 47  
Leu Val Phe Phe Ala  
1 5

<210> 48  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (5)  
<223> CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub>H attached at the n-terminus

<400> 48  
Leu Val Phe Phe Ala  
1 5

<210> 49  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 49  
Lys Leu Val Trp Phe Ala  
1 5

09724842.073101

<210> 50  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 50  
Lys Leu Val Phe Trp Ala  
1 5

<210> 51  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 51  
Lys Leu Val Trp Trp Ala  
1 5

<210> 52  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 52  
Lys Leu Val Tyr Phe Ala  
1 5

<210> 53  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>

0974842.073101  
FOI#20-2484260

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 53

Lys Leu Val Phe Tyr Ala

1

5

<210> 54

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<400> 54

Lys Leu Val Tyr Tyr Ala

1

5

<210> 55

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>

<221> MOD\_RES

<222> (4)

<223> Xaa is thienylalanine

<400> 55

Lys Leu Val Xaa Phe Ala

1

5

<210> 56

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: All D peptides

09724842.073101

<220>  
<221> MOD\_RES  
<222> (4)  
<223> Xaa is phenylglycine

<400> 61  
Lys Leu Val Xaa Phe Ala  
1 5

<210> 62  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (5)  
<223> Xaa is phenylglycine

<400> 62  
Lys Leu Val Phe Xaa Ala  
1 5

<210> 63  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: All D peptides  
or peptidomimetics

<220>  
<221> MOD\_RES  
<222> (4)..(5)  
<223> Xaa is phenylglycine

<400> 63  
Lys Leu Val Xaa Xaa Ala  
1 5